

# HAPPENINGS at the SAB

...ensuring a solid technical basis for environmental protection

Volume E6 Number 7

July 2001

## OPENING UP

### THE SAB SELECTION



### PANEL PROCESS

#### EDITORIAL

The Science Advisory Board (SAB) consists of over 100 Members who are assigned to one of the ten **Committees** of the Board. The majority of issues that come to the SAB for consideration are assigned to one or another of these Committees. In many instances, the combined expertise of the Members on a Committee is augmented by the addition of one or more Consultants, in order to bring specific disciplinary expertise to bear

on a particular issue. Such Consultants are drawn from our existing stable of 300+ experts or are recruited for the issue under study. The group of experts who actually conduct the review, and who have their names associated with the report -- be they simply a pre-existing SAB committee or a collection of **Members**, existing **Consultants**, and/or new **recruits** -- is the **SAB panel**.

Over the next few months, the SAB is transitioning to a process that will allow for more public input into the process through which membership on its panels is determined. This move is being taken, in part, in response to recommendations stemming from a General Accounting Office (GAO) investigation into the SAB panel selection process.

Future issues of HAPPENINGS will identify those upcoming issues for which public suggestions are sought for the names of experts to serve on the panels. In some cases (Type A), the panel will consist primarily of an existing Committee, possibly augmented by a few additional experts. In

#### In this issue..

Editorial . . . . .	1
Tentative Calendar for July & August. . . . .	3
Committee Activities in June . . . . .	6
Community Involvement Workshop . . . . .	8
SAB Reports in Progress . . . . .	10
Abstracts of New Reports. . . . .	11
Computer News . . . . .	12
Staff/Members/Consultants/News . . . . .	13
Bon Mot . . . . .	13

other cases (Type B), the panel will be formed *de novo*, with its membership drawn from the ranks of current SAB Members and Consultants, plus new recruits who will be enlisted to ensure the appropriate mix of expertise and points of view.

**T**o further guide public participation in the nomination of candidates for these panels, our intent is to work with the Agency so that Charge to the SAB will be posted on our Website well in advance of the meeting. The Charge -- those specific technical questions that panel is being asked to address -- should provide a clear indication of what the Board is being asked to do so it can identify the types of experts needed on the panel and, hence, the type of individuals for whom nominations are being sought.

**O**nce the new process is fully instituted, we intend to post backgrounds of a subset of panel candidates

on our Website and solicit public input, before making a final selection of panelists. This process models a procedure adopted by the National Research Council a few years ago.

**O**ur continuing goal is to provide independent, objective, rigorous peer review of Agency documents in order to provide advice to the Administrator and the public on the strengths and weaknesses of the technical basis upon which the Agency's environmental decisions are based. Increased public contributions can only help to further that goal.

Donald G. Barnes  
SAB Staff Director

## TENTATIVE SAB MEETING CALENDAR FOR JULY & AUGUST

Several of the Federal Advisory Committee Act (FACA) meetings noted below have been announced in the Federal Register (FR), together with additional background information. Readers can automatically receive e-mailed copies of FR Notices by subscribing to the SAB Listserver; see Section Updates below.

If a series of meetings is anticipated, the number of the meeting in the series is indicated in parentheses; e.g., "(#2)".

### JULY



2F

Committee: Advisory Council on Clean Air Compliance Analysis (COUNCIL) Air Quality Modeling Subcommittee  
Topics: Section 812 Study of the CAAA 1990 - Planning Meeting, Teleconference  
Location: Ariel Rios Building, Room 6013  
Chair: Dr. Trudy Cameron, University of California  
DFO: Dr. Angela Nugent  
Email: [nugent.angela@epa.gov](mailto:nugent.angela@epa.gov)

9-10

Committee: Advisory Council on Clean Air Compliance Analysis (COUNCIL)  
Topics: Review of Analytic Blueprint for the Clean Air Act (CAA) Section 812 Draft Costs and Benefits Report to Congress  
Location: Ariel Rios Building, Room 6013  
Chair: Dr. Trudy Cameron, University of California  
DFO: Dr. Angela Nugent  
Email: [nugent.angela@epa.gov](mailto:nugent.angela@epa.gov)

10F	Committee:	Environmental Engineering Committee (EEC) Subcommittee
	Topics:	Industrial Ecology Teleconference
	Location:	Ariel Rios Building, Room 6450C
	Chair:	<i>Dr. Hilary Inyang, University of North Carolina-Charlotte</i>
	DFO:	<i>Ms. Kathleen White</i>
	Email:	<a href="mailto:conway.kathleen@epa.gov">conway.kathleen@epa.gov</a>
11F	Committee:	Environmental Engineering Committee (EEC)
	Topics:	Review Meeting, Teleconference
	Location:	Ariel Rios Building, Room 6450C
	Chair:	<i>Dr. Hilary Inyang, University of North Carolina-Charlotte</i>
	DFO:	<i>Ms. Kathleen White</i>
	Email:	<a href="mailto:conway.kathleen@epa.gov">conway.kathleen@epa.gov</a>
17-18	Committee:	Executive Committee (EC)
	Topics:	Review Meeting, Cumulative Risk Assessment Framework and planning for FY02
	Location:	USEPA, Cincinnati, OH
	Chair:	<i>Dr. William Glaze, University of North Carolina-Chapel Hill</i>
	DFO:	<i>Dr. Donald G. Barnes</i>
	Email:	<a href="mailto:barnes.don@epa.gov">barnes.don@epa.gov</a>
18-20	Committee:	Ecological Processes and Effects Committee (EPEC)
	Topics:	Clean Sediment Research & Management Strategy & Ecological Management Strategy
	Location:	Westin Hotel, Cincinnati, OH
	Chair:	<i>Dr. Terry Young, Environmental Defense</i>
	DFO:	<i>Ms. Stephanie Sanzone</i>
	Email:	<a href="mailto:sanzone.stephanie@epa.gov">sanzone.stephanie@epa.gov</a>

<b>19F</b>	Committee:	Environmental Engineering Committee (EEC)
	Topics:	Surface Impoundment Teleconference
	Location:	Ariel Rios Building, Room 6450Z
	Chair:	<i>Dr. Hilary Inyang, University of North Carolina-Charlotte</i>
	DFO:	<i>Ms. Kathleen White</i>
	Email:	<a href="mailto:conway.kathleen@epa.gov">conway.kathleen@epa.gov</a>
<b>19-20</b>	Committee:	Integrated Human Exposure Committee (IHEC)
	Topics:	Indoor Air Toxics Ranking
	Location:	Westin Hotel, Cincinnati, OH
	Chair:	<i>Dr. Henry Anderson, Wisconsin Department of Health and Family Services</i>
	DFO:	<i>Mr. Samuel Rondberg</i>
	Email:	<a href="mailto:SamuelR717@aol.com">SamuelR717@aol.com</a>
<b>19-21</b>	Committee:	Executive Committee (EC) Subcommittee
	Topics:	Arsenic Benefits Rule
	Location:	Ronald Reagan Building Conference Center, Polaris Suite
	Chair:	<i>Dr. Maureen Cropper, The World Bank</i>
	DFO:	<i>Mr. Thomas Miller</i>
	Email:	<a href="mailto:miller.tom@epa.gov">miller.tom@epa.gov</a>
<b>23-24</b>	Committee:	Clean Air Scientific Advisory Committee (CASAC)
	Topics:	PM Criteria Document and PM Staff Paper
	Location:	USEPA Environmental Research Center, RTP, NC
	Chair:	<i>Dr. Philip Hopke, Clarkson University</i>
	DFO:	<i>Mr. A. Robert Flaak</i>
	Email:	<a href="mailto:flaak.robert@epa.gov">flaak.robert@epa.gov</a>

AUGUST



9F

Committee: Advisory Council on Clean Air Compliance Analysis (COUNCIL)  
Topics: Section 812 Study - Contingent Teleconference  
Location: TBD  
Chair: Dr. Trudy Cameron, University of California  
DFO: Dr. Angela Nugent  
Email: [nugent.angela@epa.gov](mailto:nugent.angela@epa.gov)

27F

Committee: Environmental Engineering Committee (EEC)  
Topics: Surface Impoundments Teleconference  
Location: Ariel Rios Building, Room 6450Z  
Chair: Dr. Hilary Inyang, University of North Carolina-Charlotte  
DFO: Ms. Kathleen White  
Email: [conway.kathleen@epa.gov](mailto:conway.kathleen@epa.gov)

To View a Tentative 6 Month Calendar Click Here  
Or

Go to the SAB website [www.epa.gov/sab/mtgcal.htm](http://www.epa.gov/sab/mtgcal.htm)

#### COMMITTEE ACTIVITIES IN JUNE



On June 1, the Ecological Processes & Effects Committee (EPEC) STAR Water and

Watersheds (WW) Review Panel held a 2-hour public teleconference to continue discussion of the Agency's Science to Achieve Results (STAR) WW grants program. This non-FACA teleconference call was a follow-up to the panel's face-to-face meeting on April 20, 2001, held in San Francisco in conjunction with the

STAR WW researchers meeting. The Panel attended several days of presentations by STAR WW grantees to hear first hand about the research directions and findings. A draft report from the Panel, expected in July, will discuss the STAR WW program's contributions to an understanding of human and ecological processes in watersheds and to the furtherance of integrated approaches to watershed research.

**O**n June 11-12, the Executive Committee's (EC), Scientific and Technological Achievement Awards (STAA) Subcommittee met in a closed session to review 126 nominated scientific papers from Agency scientists. This program is administered by ORD and is open to scientists from the entire Agency, including those who are not from ORD. The SAB provides the peer review. EPA authors of selected papers are eligible to split cash awards that range from \$1,000 to \$5,000 per nomination. The papers are sufficient quality such that the Subcommittee typically recommends approximately one third of the nominations for an award (Level I, II, III or Honorable Mention). The results of the competition will be announced by ORD.

**O**n June 12-13, the Drinking Water Committee (DWC) met to complete its review of the Contaminant Candidate List Research Plan; to consult with EPA on the development of risk assessment tools for microbiological pathogens via the water medium; and to hear of Agency plans for regulatory proposals on the Long Term 2 Surface Water Treatment Rule and the Stage 2 Disinfection Byproducts rules. Both these

rules are being proposed in conformance to the principles of agreement that emerged from a two-year long stakeholder interaction among EPA and a broad group of representatives from the environmental, public health, drinking water supplier, and technology communities.

**O**n June 13, the National-Scale Air Toxics Assessment (NATA) Review Panel of the SAB's Executive Committee's held a public conference call to review its first public draft Advisory dated June 6, 2001.

**O**n June 22, 2001, a special panel of the Advisory Council on Clean Air Compliance Analysis (COUNCIL) met via teleconference to plan its review of the "analytical blueprint" for the second "prospective study" of "The Benefits and Costs of the Clean Air Act, 2000 to 2020" (study required by Section 812 of the Clean Air Act Amendments of 1990.) The purpose of the blueprint is to provide an opportunity for SAB and public review of the major goals, objectives, methodologies, and analytical choices for the study before it is implemented. At the conference call, the panel members met to: (1) clarify the charge question related to the "analytical blueprint" for the third Section 812 Study; (2) request any supplemental materials from the Agency; (3) ask questions on materials already received from the Agency; and (4) and discuss preparations for a public meeting of the Council on Monday and Tuesday, July 9-10, 2001 in Washington, D.C.

**O**n June 25, the Health and Ecological Effects Subcommittee of the Council conducted a public teleconference call. The purpose of the call was to provide HEES members with the opportunity to review the Agency's proposed approach to assessment of health and ecological effects for the Second Prospective Study of the Benefits and Costs of the Clean Air Act, 2000-2020 and develop a draft response for the July 9-10, 2001 meeting of the Council on those issues.

**O**n June 26, the Surface Impoundments Study Subcommittee of the Environmental Engineering Committee (EEC) met by conference call to discuss the charge for the review, confirm dates for subsequent conference calls (July 19 and August 27) and the face to face meeting (September 17-19). At this meeting, the Subcommittee was briefed by the Office of Solid Waste and heard public comment on the charge. The Subcommittee made some small changes to the charge and the Subcommittee is now organizing itself to respond to the charge questions.

**O**n June 26-27, the Research Strategies Advisory Committee (RSAC) met to complete its Advisory on EPA's implementation of the peer review program. The Committee drafted their review of the selected case studies: the Risk Characterization Handbook and the reviews of the methodology for deriving ambient water quality criteria for the protection of human health and the methyl mercury bioaccumulation factors report. The Committee met with

Agency officials to continue to explore how the Agency is obtaining science from sources outside EPA. The committee also planned its activities for next year.

### COMMUNITY INVOLVEMENT CONFERENCE



**D**r. Angela Nugent attended the fourth annual U.S. Environmental Protection Agency Community Involvement Conference in San Antonio, Texas, on June 19-20, 2001. She attended at the request of members of the planning committee, who expressed an interest in a brief presentation and discussion of the SAB's draft "Commentary on Improving Science-Based Environmental Stakeholder Processes" (April 25, 2001 draft on the SAB website), and a separate request from to participate in a panel on "Community Involvement in the Adoption of New Approaches in Environmental Protection."

The Community Involvement Conference was an important opportunity for staff from all regions and program offices who work with communities to share information about their experiences, best practices, and practical and policy issues. Over 400 persons attended, with strong representation from Superfund program, water programs, and air programs from across the Agency. In many ways the meeting looked like "the future of EPA" -- at its best. EPA staff from different geographic regions and programs were looking for practical ways to work with communities to solve environmental protection. As a result,



their work led them to "integrated environmental decision making:" multi-media solutions, ways to combine environmental improvements with economic investment in communities, ways to sustain environmental initiatives through working with communities, and ways to combine environmental protection (narrowly conceived) with ecosystem protection. They were interested in how science could be used to solve community environmental issues and in social science-based tools that could help them with their work.

Approximately forty people attended the session on "Community Involvement in the Adoption of New Approaches in Environmental Protection." Attendees were surprised by, and interested in, the SAB's "Commentary Resulting from a Workshop on the Diffusion and Adoption of Innovations in Environmental Protection" (EPA-SAB-EEC-COM-01-001). Two panel members from the regions described how the principles of diffusion applied to two separate initiatives: the "Sustainable Lifestyle Campaign" and "Livable Neighborhoods." In addition, audience members were intrigued by the Commentary's application to other kinds of new approaches and saw it as a tool and as a set of references that could help them as "early adopters" of innovations, to understand some of the mechanisms at play that either frustrate or enhance adoption of new approaches to environmental protection.

The "Open Time" forum on the draft "Science and Stakeholder Involvement" Commentary attracted 10 people. Participants considered the Commentary useful and timely; they commented that the report might help attract high-level management attention, along

with resources, to the task of bringing science to communities. Participants expressed appreciation for the Commentary's recommendations that the Agency explore new mechanisms to involve the "general public," and not just parties directly interested in environmental disputes. Finally, there was appreciation for the Commentary's sensitivity to the appropriate role science plays in environmental decision-making -- that it is complementary to other factors, such as values, that also play a major role. The keynote address on the first day of the conference also reinforced the value of the Commentary. Mr. Robert Huston, Commissioner of the Texas Natural Resource Conservation Commission (appointed by Governor Bush; fresh from a meeting with Governor Whitman) spoke about public involvement in his Commission's activities and the need to involve a broad spectrum of the general public in environmental decision-making in ways that are well-planned, and that take account of the science and information available on environmental issues.

Finally, the keynote address on the second day sounded a grace note for the Board. In that talk, Mr. Robert Potts, head of The Nature Conservancy (TNC)-Texas Chapter, mentioned the importance of the SAB's "Reducing Risk Report" for his work in Texas. It elevated concerns nationally about ecosystem protection and strengthened EPA's abilities to work in partnership with TNC and others to protect wildlife.

## SAB REPORTS IN PROGRESS



### **a** PROJECTS TO BE REVIEWED AT THE JULY 17-18 EC MEETING.

#### EC

- 1) New Approaches to Stakeholder Involvement: An SAB Commentary

#### EC Subcommittee

- 2) Scientific & Technological Achievement Award Nominations for FY2000: An SAB Report

- 3) Process Improvements for Scientific & Technological Achievement Awards: An SAB Commentary

#### RSAC

- 4) Peer Review Implementation at EPA: An SAB Report

### **b** PROJECTS DUE FOR LATER EC MEETING

#### DWC

- 1) The EPA Candidate Contaminant List (CCL) Research Plan:

### An SAB Report

#### EPEC

- 2) Framework for Reporting on Ecological Conditions: An SAB Report
- 3) Science to Achieve Results (STAR)-Waters and Watersheds: An SAB Report

#### EEC

- 4) Industrial Ecology: An SAB Consultation

#### EC Subcommittees

- 5) National Air Toxics Assessment (NATA): An SAB Report

#### IRP/EEC

- 6) The Integrated Risk Project (IRP) Risk Reduction Options: An SAB Report

### **c** PROJECTS THAT DO NOT REQUIRE EC APPROVAL (CASAC & COUNCIL)

None at this time.

### **d** PROJECTS THAT HAVE RECEIVED EC APPROVAL AND AWAIT COMPLETION

#### EEC

- 1) Measures of Environmental Technology Performance: An SAB Commentary

## ABSTRACTS OF NEW REPORTS



**a GENII Version 2 Environmental Radiation Dosimetry system; An SAB Advisory  
EPA-SAB-RAC-ADV-01-002**

At the request of the EPA's Office of Radiation and Indoor Air (ORIA), the Radiation Advisory Committee (RAC) of the Science Advisory Board (SAB) reviewed the GENII v.2 computer code developed by Pacific Northwest National Laboratory (PNNL) to perform dose-response and risk assessments of environmental releases of radionuclides. The code builds on a conceptual site model linking modules through the FRAMES platform. The RAC found the GENII v.2 code to include appropriate modules and it concluded that FRAMES provides a reasonable and flexible modeling platform. However, the RAC recommended adding newer models to the GENII v.2 code, specifically for air dispersion and ground and surface water transport of radionuclides, as well as modules capable of handling emergency conditions. The RAC was concerned about the potential for non-transparent and unrealistically conservative (i.e., higher than more realistic assumptions might produce) risk estimates.

The RAC commended ORIA for including

the capability of providing stochastic estimates of risk through the Sensitivity/Uncertainty Multimedia Modeling Module (SUM<sup>3</sup>) driver but questioned its ability to investigate the degree of conservatism in the code to, identify the importance of input parameters, and to provide useful measures of uncertainty.

In general, the RAC found the GENII v.2 code to be a useful addition to the dose and risk assessment toolbox. The RAC suggested several strategies for making the code more user friendly, including improved documentation, a User's Guide, and to provide training for potential users. The RAC encouraged ORIA to develop a vision and an attendant mission statement for FRAMES and GENII v.2 as a basis for evaluating these tools.

**b Review of the Interagency Steering Committee on Radiation Standards (ISCORS) Sewage Sludge Subcommittee Report, Radionuclides in Sewage Sludge: Dose Assessment, Dose Modeling Report  
EPA-SAB-RAC-ADV-01-003**

On December 12-14, 2000, the Radionuclides in Sewage Sludge Subcommittee (RSSS) of the Radiation Advisory Committee (RAC) reviewed the dose modeling report of the Interagency Steering Committee on Radiation Standards, Sewage Sludge Subcommittee (ISSS). This included advice on dose modeling methodology, model selection, scenarios, approaches to obtaining modeling parameters and distributions, and approaches for uncertainty.

The RSSS accepted the ISSS's decision to use the model RESRAD, but supported the use of other radiation dose models for bench marking RESRAD's application to sewage sludge dose modeling. The RSSS also accepted ISSS's use of radiation dose quantities, rather than risk, to express the impact of radionuclides in sewage sludge. The RSSS recommended that the revised dose coefficients published in the International Commission on Radiological Protection (ICRP) 72 be used if feasible or, at a minimum, that the possible effects of age on dose be considered. While commending the ISSS for identifying a range of plausible radiation exposure scenarios, the RSSS identified several exposure pathways that were not considered and recommended that regulatory requirements concerning sludge disposition be integrated into the modeling effort to prevent use of unrealistic scenarios or parameters. The RSSS recommended that the selection of parameters and their distributions, as well as the sensitivity and uncertainty analyses, be better described and that a two-dimensional uncertainty analysis, addressing both variability and uncertainty, be considered. The RSSS made recommendations beyond the charge to consider exposure to liquid effluent from Publically Owned Treatment Works (POTWs), and to use SI units. The RSSS made a general recommendation to update Federal Guidance Report (FGR) 11 to reflect values in ICRP Publication 72.

## COMPUTER NEWS



(1) SAB Website is within the EPA Home Page. You are invited to visit the SAB Website at URL: <http://www.epa.gov/sab>  
The site offers such features as

- (a) Full-text reports for FY1994-FY2001
- (b) Background information about the structure, function, and membership of the SAB
- (c) A rolling two-month calendar of SAB meetings
- (d) The most current issue of HAPPENINGS
- (e) Draft/final agendas of upcoming meetings and draft/final minutes of past meetings.

(2) SAB Listserver - By subscribing to the free SAB Listserver, you will automatically receive copies of all Federal Register notices announcing SAB meetings, together with brief descriptions of the topics to be covered at the meetings. These notices will be e-mailed to you within 24-hours of their publication in the Federal Register.

To subscribe, simply send the following message, inserting your names,

Subscribe epa-sab2 FIRSTNAME  
LASTNAME  
to

[listserver@unixmail.rtpnc.epa.gov](mailto:listserver@unixmail.rtpnc.epa.gov)

3) Obtaining copies of SAB reports:

- (a) Single hard copies of SAB reports

are available for distribution by contacting,  
Ms. Priscilla Tillery-Gadson

Phone: (202) 564-4543

Email: [tillery.priscilla@epa.gov](mailto:tillery.priscilla@epa.gov)

or

by faxing your request to (202) 501-0256.

Staff on June 18 as the new management assistant for the CASAC and COUNCIL committees. She brings with her 15 years of federal service where 9 of which was spent in Region 4 in EPA's Science & Ecosystem Support Division, Athens, GA.

*The SAB would like to send out their condolences to Tom Miller and his family in the passing of his mother on June 12.*

## STAFF/MEMBER/CONSULTANT NEWS



### Staff

Mr. A. Robert Flaak received an EPA Bronze Award for uniquely outstanding, dedicated and successful performance in establishing a nationally recognized peer review program that has enhanced the quality of science across the Agency.

Tom Miller received an award for going above and beyond the normal requirements of his job in a controversial review on Arsenic.

Vickie Richardson was recognized for serving 10 years of federal service.



Rhonda Fortson joined the SAB

## BON MOT



The following was contributed by a noted SAB consultant who, understandably, prefers to remain anonymous. In a thinly-veiled attempt to shield his own culpability, he shamelessly attributes this (modified) offering to his daughter:

An itinerant guru walked the length of the Ganges River barefoot, which resulted in incredible toughness on the soles of his feet. His restrictive diet of sticks, twigs, and garlic cloves left him with a frail body and a distinctive odor. And yet, American celebrities flocked to his presence. One of them, Dick Van Dyke, described him as a super calloused fragile mystic hexed by halitosis.